WHAT IS CLAIMED IS:

1. An adaptive slicer threshold generation system, comprising:

a first moving average filter to determine a first average value of a first binary signal;

a second moving average filter to determine a second average value of a second binary signal; and

a combiner to combine the first average value of the first binary signal and the second average value of the second binary signal to generate a combined output.

2. The adaptive slicer threshold generation system according to claim 1, wherein the adaptive slicer threshold generation system further includes a gain element to set a value of a slicer threshold within a data eye.

3. The adaptive slicer threshold generation system according to claim 1, wherein at least one of the first moving average filter and the second moving average filter includes a leakage element to control an adaptation rate of the slicer threshold.

4. The adaptive slicer threshold generation system according to claim 1, wherein at least one of the first moving average filter and the second moving average filter includes

a first delay element to delay a received binary signal;

a second combiner to combine the received binary signal, a delayed binary signal from the first delay element, and a delayed output signal from a second delay element; and

a second gain element to manipulate an output signal from the second combiner, wherein

the second delay element delays the output signal that is combined by the second combiner with the received binary signal and the delayed binary signal.

5. An adaptive slicer threshold generation system, comprising:

a minimum detector to determine a minimum value of a binary one;

a peak detector to determine a maximum value of a binary zero; and

a combiner to combine the minimum value of the binary one and the maximum value of the binary zero to generate a combined output.

6. The adaptive slicer threshold generation system according to claim 5, wherein the adaptive slicer threshold generation system further includes a gain element to set a value of a slicer threshold within a data eye.

7. The adaptive slicer threshold generation system according to claim 5, wherein at least one of the minimum detector and the peak detector includes a leakage element to control an adaptation rate of the slicer threshold.

8. The adaptive slicer threshold generation system according to claim 5, wherein the minimum detector includes

a minimum comparator to compare a received binary signal with a delayed output signal from a second combiner; and

a delay element to delay an output signal from the second combiner that is compared with the received binary signal by the minimum comparator, wherein

the second combiner combines the output signal from the minimum comparator with a leakage signal from a second gain element, and

the second gain element manipulates the output signal from the second combiner.

9. The adaptive slicer threshold generation system according to claim 5, wherein the peak detector includes

a peak comparator to compare a received binary signal with a delayed output signal from a second combiner; and

a delay element to delay an output signal from the second combiner that is compared with the received binary signal by the minimum comparator, wherein

the second combiner combines an output signal from the peak comparator with a leakage signal from a second gain element, and

the second gain element manipulates the output signal from the second combiner.

10. A receiver system, comprising:

a receiver circuit;

an antenna coupled to the receiver circuit; and

an adaptive slicer threshold generation system coupled to the receiver circuit, having

a first moving average filter to determine a first average value of a first binary signal,

a second moving average filter to determine a second average value of a second binary signal, and

a combiner to combine the first average value of the first binary signal and the second average value of the second binary signal to generate a combined output.

11. The receiver system according to claim 10, wherein the adaptive slicer threshold generation system further includes a gain element to set a value of a slicer threshold within a data eye.

12. The receiver system according to claim 10, wherein at least one of the first moving average filter and the second moving average filter includes a leakage element to control an adaptation rate of the slicer threshold.

13. The receiver system according to claim 10, wherein at least one of the first moving average filter and the second moving average filter includes

a first delay element to delay a received binary signal;

a second combiner to combine the received binary signal, a delayed binary signal from the first delay element, and a delayed output signal from a second delay element; and

a second gain element to manipulate an output signal from the second combiner, wherein

the second delay element delays the output signal that is combined by the second combiner with the received binary signal and the delayed binary signal.

14. A receiver system, comprising:

a receiver circuit;

an antenna coupled to the receiver circuit; and

an adaptive slicer threshold generation system coupled to the receiver circuit, having

a minimum detector to determine a minimum value of a binary one,

a peak detector to determine a maximum value of a binary zero, and

a combiner to combine the minimum value of the binary one and the maximum value of the binary zero to generate a combined output.

15. The receiver system according to claim 14, wherein the adaptive slicer threshold generation system further includes a gain element to set a value of a slicer threshold within a data eye.

16. The receiver system according to claim 14, wherein at least one of the minimum detector and the peak detector includes a leakage element to control an adaptation rate of the slicer threshold.

17. The receiver system according to claim 14, wherein the minimum detector includes

a minimum comparator to compare a received binary signal with a delayed output signal from a second combiner; and

a delay element to delay an output signal from the second combiner that is compared with the received binary signal by the minimum comparator, wherein

the second combiner combines the output signal from the minimum comparator with a leakage signal from a second gain element, and

the second gain element manipulates the output signal from the second combiner.

18. The receiver system according to claim 14, wherein the peak detector includes

a peak comparator to compare a received binary signal with a delayed output signal from a second combiner; and

a delay element to delay an output signal from the second combiner that is compared with the received binary signal by the peak comparator, wherein

the second combiner combines an output signal from the peak comparator with a leakage signal from a second gain element, and

the second gain element manipulates the output signal from the second combiner.

19. A method of generating an adaptive slicer threshold, comprising:

determining a first average value by combining a first received binary signal and a first delayed binary signal;

determining a second average value by combining a second received binary signal and a second delayed binary signal;

combining the first average value and the second average value to generate a combined output; and

setting a value of a slicer threshold within a data eye.

20. The method according to claim 19, wherein the first average value is further determined by combining a first leakage signal with the first received binary signal and the first delayed binary signal.

21. The method according to claim 19, wherein the second average value is further determined by combining a second leakage signal with the second received binary signal and the second delayed binary signal.

22. A method of generating an adaptive slicer threshold, comprising:

determining a minimum value of a binary one by comparing a first received binary signal with a first delayed output signal;

determining a maximum value of a binary zero by comparing a second received binary signal with a second delayed output signal;

combining the minimum value of the binary one and the maximum value of the binary zero to generate a combined output; and

setting a value of a slicer threshold within a data eye.

23. The method according to claim 22, wherein the minimum value of the binary one is further determined by combining a first leakage signal with a first output signal.

24. The method according to claim 22, wherein the maximum value of the binary zero is further determined by combining a second leakage signal with a second output signal.

25. An adaptive slicer threshold generation system, comprising:

a machine-readable storage medium; and

machine-readable program code, stored on the machine-readable storage medium, the machine-readable program code having instructions to

determine a first average value by combining a first received binary signal and a first delayed binary signal,

determine a second average value by combining a second received binary signal and a second delayed binary signal,

combine the first average value and the second average value to generate a combined output, and

set a value of a slicer threshold within a data eye.

26. The system according to claim 25, wherein the machine-readable program code further includes instructions to combine a first leakage signal with the first received binary signal and the first delayed binary signal to determine the first average value.

27. The system according to claim 25, wherein the machine-readable program code further includes instructions to combine a second leakage signal with the second received binary signal and the second delayed binary signal to determine the second average value.

28. An adaptive slicer threshold generation system, comprising:

a machine-readable storage medium; and

machine-readable program code, stored on the machine-readable storage medium, the machine-readable program code having instructions to

determine a minimum value of a binary one by comparing a first received binary signal with a first delayed output signal,

determine a maximum value of a binary zero by comparing a second received binary signal with a second delayed output signal,

combine the minimum value of the binary one and the maximum value of the binary zero to generate a combined output, and

set a value of a slicer threshold within a data eye.

29. The system according to claim 28, wherein the machine-readable program code further includes instructions to combine a first leakage signal with a first output signal to determine the minimum value of the binary one.

30. The system according to claim 28, wherein the machine-readable program code further includes instructions to combine a second leakage signal with a second output signal to determine the maximum value of the binary zero.